Scott M. Matheson, Governor Temple A. Reynolds, Executive Director Cleon B. Feight, Division Director

4241 State Office Building • Salt Lake City, UT 84114 • 801-533-5771

June 8, 1982

Mr. John Hardaway Manager, Regulatory Affairs P.O. Box 441464 Aurora, Colorado 80014

RE: Sandwash Development

DOGM comments on Tosco

response ACT/047/001

Dear John:

Thanks again for your ready availability in responding to OGM technical comments. As a result of our June 7, 1982 meeting many issues were resolved and others were consolidated.

Please find the enclosed listing of OGM's final comments. If any questions arise, please don't hesitate to contact the Division.

Sincerely,

THOMAS L. PORTLE

RECLAMATION SOILS SPECIALIST

Enclosure

cc: Sally Kefer, w/encl.

Susan Linner, w/encl.

TLP:dc

## Division comments on Tosco response to Initial Review

RULE	TOSCO #	COMMENTS
M-3(2)		If there will be different revegetation standards for different areas (i.e. vegetated or non-vegetated), these different areas should be shown on a map or correlated with the existing soils map. A discussion of the reclamation treatments that each area will receive should be submitted. A specific revegetation success standard for areas that will be seeded needs to be determined prior to any disturbance.
M-3(2)	4,7,9a	Utilizing the available soils baseline data the applicant should address the following concerns:

- The total area from which the best soils (EkD and AkC) were obtained should be arrived at. The applicant must be able to replace the soils in these areas. Please provide the volume of soil necessary to accomplish this. Division understands that the company will guarantee that a minimum of 28,000 cubic yards will be stockpiled. Further, that site specific depth information generated along with site preparation will be translated to volume approximations. This method will account for any discrepancy between the minimum and actual volumes stockpiled. Additional soils may be generated from other soil types if the material is deemed worthy by a qualified person. Also, soils which are not used in fill embankments to enhance invasion of native species may be transported to the topsoil stockpile site. In line with this, soils which collect in the sediment pond(s) which we show not to be detrimental to revegetation success may be stockpiled or used in revegetation. It is understood that materials from any of these sites must be:
  - shown by chemical analysis to be compatible with the topsoil in the stockpile; or
  - b) stockpiled independently of the topsoil stockpile and utilized in marginal areas.
- 2) The applicant should utilize soil survey data to determine if this material should or should not be saved. If the option is left open, a separate stockpile should be provided in the vicinity of the proposed topsoil stockpile site to prevent disturbance to the site which will at this point have been in existence for up to 2 years.

## M-3(2)(c) 6a,6b,9d

It is necessary to protect the stored topsoil from wind and water erosion. The applicant has agreed to install a berm or employ some other means to control erosion resulting from runoff when it becomes apparent (from signs of rill or gully erosion) that a concern exists. This determination may be made by the applicant as a result of routine reconnaissance or as determined by Division personnel during on-site observation.

The applicant will provide a more specific account of how the topsoil will be protected prior to the establishment of a successful cover of vegetation. Options discussed included mulching the stockpile.

M-10 9b

Tosco has yet to address the question of what "exchangeable sodium content of 15" which appears in the application on Page 19 means.

The applicant has proposed to solve this problem by providing the Division with SCS data generated in the proposed area of disturbance.

Tosco indicates that site specific soils determination regarding suitability for salvaging will be determined by a qualified professional. Please describe what criteria is considered to determine someone is a qualified professional and what criteria will be employed by this person to make these important determinations.

M-10(6)

The Division and Tosco agreed that random samples (10) be taken in areas where waste rock and muck was utilized in pad construction. Initially samples would be tested for pH and electrial conductivity (EC). If these tests should indicate any problems more detailed analysis would be performed. The grading plan could be altered to isolate these materials should any condition be detected which may be detrimental to revegetation success.

M-10-12 12c

The Division must dutifully assume "worst case scenario" (one which requires reclamation). In light of this, test plots will be established attendant to the "staged revegetation" approach suggested by the applicant. This procedure may yield useful information concerning coarse ore reclamation. This approach will insure against a large-scale revegetation failure should reclamation be required.